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### Therapeutic relationships

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# Therapeutic relationships: their specificity in predicting outcomes for people with psychosis using clinical and vocational services

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## Abstract

**Objective** To determine the distinctions between the client–keyworker relationship and the client–vocational worker relationship by assessing their impact on clinical outcomes and exploring the associations between the two. **Methods** As part of an international randomised controlled trial of supported employment ( $n = 312$ ), client–keyworker relationship and client–vocational worker relationship were each tested against clinical and social functioning 6 months

later. Associations between the two relationships over time were explored.

**Results** Client–keyworker relationship predicted quality of life, while client–vocational worker relationship, as rated by the client, did not predict any clinical or social functioning outcomes. Vocational worker-rated relationship predicted reduced depression. The client–keyworker and client–vocational worker relationships were correlated, but this did not change over time.

**Conclusion** The impact of the client–vocational worker is likely to be on the shared task of finding employment, rather than on clinical and social functioning. Good client–vocational worker relationships do not detract from client–keyworker relationships.

For the EQOLISE Group.

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**Keywords** Mental health services · Physician–patient relationship · Vocational rehabilitation

## Background

The therapeutic relationship between clients of community mental health services and their keyworkers has been shown to be associated with a range of outcomes including engagement with services and quality of life [3, 6, 23]. This relationship has only relatively recently been studied in general mental health services, in which context it has been conceptualised somewhat differently from in psychotherapy research [6, 21]. Despite this conceptual work, it is unclear whether therapeutic relationship ratings reflect client factors, including predisposition towards services, or the particular relationship built with the professional. Meeting clients' care needs has been found to have a positive impact on therapeutic relationships [15], as have interpersonal processes such

as sensitivity [14], but clients' psychopathology may also have a bearing on relationship ratings [3]. In fact, the practice of collecting client-rated outcomes has recently been called into question by emerging evidence that they may be influenced by a general tendency for positive or negative appraisal [12]. Hansson et al. found three client-rated outcomes to be influenced by such a tendency, namely symptoms, quality of life and needs for care, although satisfaction with the treatment proved to be a distinct factor [13]. Whether or not the therapeutic relationship might be an outcome influenced by a general appraisal factor has not been tested.

This begs the question: Do therapeutic relationship ratings genuinely reflect a relationship generated between two parties or do they indicate a pre-existing tendency of the client's? If the latter were to be true, would this tendency be a general one for positive or negative appraisal of one's circumstances or a more particular tendency to form good relationships with people? Similarly, does a good therapeutic relationship have a bearing solely on outcomes expected to be relevant to that client–professional relationship (such as clinical outcomes following from a client–clinician relationship) or could it impact on other outcomes: that is, is it task specific?

A recent international randomised controlled trial (RCT) of supported employment compared with usual vocational rehabilitation [5] provided an opportunity to explore some of these questions by collecting data on two relationships: the client's relationship with the clinical keyworker and the client's relationship with the vocational worker. This study found early good relationships with vocational workers to predict getting a job, although relationships with clinical keyworkers did not [8]. This provides preliminary evidence to suggest that outcomes arising from a particular relationship may be specific to the task in hand.

## Objectives

To assess the inter-relationship of two therapeutic relationships (one with the clinical keyworker, the other with the vocational worker), and their specificity to the tasks undertaken, two objectives were addressed:

1. To explore associations between clients' relationships with (a) their clinical keyworkers and (b) their vocational workers and their clinical and social functioning outcomes;
2. To explore associations between clients' ratings of their relationships with their clinical keyworkers and their vocational workers.

## Materials and methods

### Sample, setting and procedure

Data were taken from a multi-centre RCT conducted in six European centres—London, Ulm-Günzburg, Rimini, Zurich, Groningen and Sofia—comparing IPS to usual high-quality vocational rehabilitation [5]. Clients ( $n = 312$ ) were recruited when they had a psychotic illness, were aged 18 to local retirement age, had been ill with major role dysfunction for at least 2 years, were living in the community, had not been in competitive employment in the preceding year and wanted to enter competitive employment. They were randomly allocated to receive either individual placement and support (IPS) [2], a 'place and train' model of supported employment provided by a single IPS worker located within the community mental health team (CMHT) or equivalent, or traditional good-quality vocational rehabilitation using the 'train and place' model [5]. They were followed up for 18 months, with interviews at baseline (T0) and 6, 12 and 18 months (T1–T3).

All clients were in the care of a clinical 'keyworker': a member of the CMHT responsible for their care, who might be a community psychiatric nurse, occupational therapist or social worker, or other clinician performing an equivalent role. For clients allocated to the IPS service, their 'vocational worker' was their IPS worker; for those allocated to the vocational service it was their named worker in that service.

Data were collected through interview on both vocational and clinical outcomes. Vocational outcomes comprised entering competitive employment (on the open market, paid at prevailing wages), operationalised as working for at least 1 day over the entire follow-up period, and number of hours worked. The following clinical outcomes were collected: hospitalisation, psychiatric symptoms (Positive and Negative Symptoms Scale: PANSS [16]), global functioning (Global Assessment of Functioning—Symptoms and Disability: GAF-S and GAF-D [10]), depression and anxiety (Hospital Anxiety and Depression Scale: HADS [30]), social disability (Groningen Social Disability Schedule: GSDS [28, 29]), quality of life (Lancashire Quality of Life Profile—European Version: LQoLP-EU [11, 22]), self-esteem (Rosenberg Self-Esteem Scale: RSE [26]) and needs for care (Camberwell Assessment of Need, European short version: CAN-EU [19, 23]). Clinical diagnosis was confirmed by OPCRIT [20]. Remission was defined as meeting van Os et al.'s [27] criteria at two consecutive time points: delusions, unusual thought content, hallucinatory behaviour, conceptual disorganisation, mannerism/posturing, blunted affect, passive/apathetic social withdrawal and lack of

spontaneity and flow of conversation being rated as absent, minimal or mild by PANSS.

Clients were also asked to complete the client-rated Helping Alliance Scale (HAS [24]), a six-item scale comprising five visual analogue items and one categorical item. This was used in two versions: the original HAS (denoted as HAS-k) was rated by the client about their relationship with their clinical keyworker at baseline and each follow-up; and a minimally adapted version (HAS-v) pertaining to the relationship with the vocational worker (IPS worker or named worker in the control service) was also rated by the client at each follow-up interview.

The client's relationship with the vocational worker was also assessed from the professional's point of view. Each vocational worker was asked at each follow-up point to complete the professional version of HAS (denoted as HAS-p) (provided by R. McCabe, personal communication), a seven-item scale comprising five visual analogue items and two open questions (the latter not analysed here) (Fig. 1).

## Analyses

### Predictors of clinical and social functioning

**Relationships with clinical keyworkers** To explore the associations between the client–keyworker relationship and clinical and social functioning outcomes 6 months later, HAS-k at each time point from T0 onwards was tested for associations with clinical and social functioning variables at the subsequent time point. Outcome variables were functioning in terms of global symptoms and disability (GAF-S and GAF-D), positive, negative and general symptoms (PANSS), anxiety and depression (HADS-A and

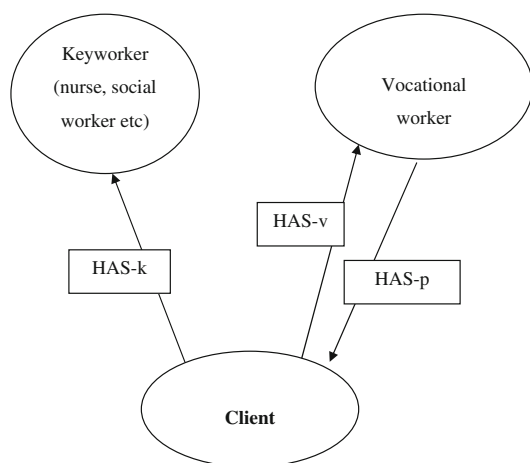
HADS-D), overall subjective quality of life (LQOLP), social disability (GSDS total score), remission and whether hospitalised or not during that 6-month period.

**Relationships with vocational workers** To explore the associations between the client–vocational worker relationship (both client- and professional-rated) and clinical and social functioning outcomes 6 months later, HAS-v and HAS-p at each time point from T1 onwards were tested for associations with clinical and social functioning variables at the subsequent time point. The same outcome variables were utilised.

As data were used from multiple time periods, for each continuous outcome, a linear regression model was fitted incorporating a random client effect to adjust for repeated measurements of clients (PROC MIXED in SASv9 for Unix). For the binary outcomes (remission and hospitalisation), a logistic regression model was used incorporating a random client effect to adjust for repeated measurements of clients (PROC GLIMMIX in SASv9 for Unix).

### Associations between relationships with clinical and vocational workers

To determine whether change in the client's rating of the client–vocational worker relationship was associated with change in their rating of the client–keyworker relationship, the association of HAS-v with HAS-k (as the dependent variable) was tested using data from T1 to T3 in a multi-level model incorporating a random client effect (PROC MIXED in SASv9 for Unix). The model was then repeated including a fixed time effect (to determine whether HAS-k was changing over time) and a fixed HAS-v  $\times$  time interaction effect (to determine whether the relationship between HAS-v and HAS-k was changing over time).



**Fig. 1** Therapeutic relationships and measures. HAS-k relationship with the keyworker, rated by client, HAS-v relationship with the vocational worker, rated by the client, HAS-p relationship with the vocational worker, rated by the vocational worker

## Results

### Sample

Demographic and illness characteristics of the sample are reported elsewhere [4, 5]. The majority of the sample (248, 80.3%) had a diagnosis of schizophrenia and were male (188, 60.3%). Of the 312 participants, HAS-k data were available for all but one at baseline and 239 (76.6%) at final follow-up (T3).

At T1, HAS-v data were available for 228 (87.4% of the 261 clients who had entered the vocational service by this point). At T3, HAS-v data were available for 176 (80.4% of the 219 clients in the service, of whom only 193 had been interviewed). HAS-p data were available for 206 clients (202 client–professional pairs) at T1, falling to 163 at T3.

**Table 1** Therapeutic relationship data

	<i>N</i>	T0	<i>N</i>	T1	<i>N</i>	T2	<i>N</i>	T3
HAS-k (0–55)	311	42.5 (9.27) (5.5–42.5)	261	41.4 (9.63) (14.0–55.0)	249	41.3 (9.41) (2.2–55.0)	239	41.3 (9.71) (5.0–55.0)
Same keyworker as previously <i>n</i> (%)	–	–	252	201 (79.8)	244	201 (82.4)	239	196 (82.0)
HAS-v (0–55)	–	–	228	40.4 (11.48) (0.0–55.0)	208	40.1 (11.65) (0.0–55.0)	176	41.2 (10.26) (1.3–55.0)
HAS-p (0–55)	–	–	206	33.1 (9.52) (4.0–50.0)	182	31.4 (10.53) (1.4–50.0)	163	32.1 (11.21) (2.5–50.0)

Mean (SD) (range) unless otherwise stated

The majority of clients at each time point had not had a change of keyworker. Mean levels of the client–keyworker relationship at baseline were 42.4 (out of 55), changing very little over time. Mean levels of the client-rated client–vocational worker relationship were only slightly lower than those of the client–keyworker relationship at T1 (40.4 vs. 41.4) and changed very little over time (Table 1).

#### HAS ratings as predictors of clinical and social functioning

##### *Relationships with clinical keyworkers*

The client–keyworker relationship was significantly associated only with overall subjective quality of life ( $r = 0.01$ , 95% CI 0.001, 0.01;  $P = 0.013$ ), with a HAS-k rating ten points higher (out of 55) being associated with a 0.1 point higher quality of life rating (out of 7) 6 months later.

##### *Relationships with vocational workers*

There were no significant associations between the client-rated client–vocational worker relationship and the clinical and social functioning variables 6 months later.

The professional-rated client–vocational worker relationship was significantly associated with global symptoms and disability, positive, negative and general symptoms, overall social disability (GSDS total score) and with remission, all at the 5% level, while depression approached significance (Table 2). Having a HAS-p rating ten points higher (out of 55) at any given time point was associated with: a two-point higher GAF-S score, a 2.5 point higher GAF-D score (both out of 100), a 1.1 point lower positive symptom score and a 0.9 point lower negative symptom score (both out of 43), a 0.8 point lower general symptom score (out of 97), a 0.8 point lower total GSDS score (out of 21) and a 0.4 point lower HADS-D score (out of 21) 6 months later, although the last of these only approached significance; and with a 60% higher odds of being in remission for the subsequent 6 months.

**Table 2** HAS-p as a predictor of clinical and social functioning

Variable	Regression coefficient	95% CI		<i>P</i> value
GAF-S	0.20	0.09	0.30	<0.001
GAF-D	0.25	0.14	0.36	<0.001
HADS-D	−0.04	−0.08	0.003	0.069
PANSS positive	−0.11	−0.15	−0.06	<0.001
PANSS negative	−0.09	−0.14	−0.04	0.001
PANSS general	−0.16	−0.24	−0.09	<0.001
GSDS total	−0.08	−0.11	−0.04	<0.001
Variable	Odds ratio	95% CI		<i>P</i> value
Remission	1.06	1.02	1.09	0.007

Only variables predicted by HAS-p are presented

Given these significant associations with professional-rated client–vocational worker relationship, an additional analysis was conducted to determine whether any significant associations would be found between HAS-p ratings and the clinical and social variables measured at the same time point, using data from contemporaneous data points. When the HAS-p analysis was repeated using contemporaneous data points, significant associations were again found between HAS-p and global symptoms and disability ( $P = 0.025$  and  $P < 0.001$ , respectively), positive ( $P < 0.001$ ), negative ( $P < 0.001$ ) and general ( $P = 0.001$ ) symptoms, overall social disability ( $P = 0.002$ ) and remission ( $P < 0.001$ ), but not with depression. HAS-p was also significantly associated with contemporaneous overall subjective quality of life ( $r = 0.007$ , 95% CI 0.000, 0.013,  $P = 0.040$ ), while the association with having been hospitalised in the previous 6 months approached significance (OR = 0.97, 95% CI 0.946, 1.002,  $P = 0.065$ ).

#### Associations between relationships with clinical and vocational workers

Client–keyworker relationship and client-rated client–vocational worker relationship were significantly associated overall ( $B = 0.24$ , 95% CI 0.17, 0.31,  $P \leq 0.0001$ ).



When a time variable and a time  $\times$  HAS-v interaction were added, these were not significant ( $F = 0.76$ ,  $P = 0.469$ ;  $F = 0.72$ ,  $P = 0.489$ , respectively), indicating that neither HAS-k nor the association between HAS-k and HAS-v changed over time.

## Discussion

This study collected therapeutic relationship ratings from clients about two relationships—that with the clinical keyworker and that with the vocational worker—at multiple time points, as well as a third rating, the vocational workers' ratings of the relationship with their clients; such longitudinal relationship data are still rare in community mental health research [15] and provide an opportunity to explore correlates of these relationships and their outcomes over time. This multi-level analysis was more powerful than analyses more usually conducted of baseline therapeutic relationship against final outcome, as it accounted for shifts in the therapeutic relationship as it developed over time. Collecting relationship data on two different ongoing professional relationships, moreover, is unprecedented and provides a unique opportunity to explore whether relationships with professionals, for people with psychotic disorders, are driven by 'non-specific' client factors such as a generally favourable predisposition towards services or are unique to the actual relationship built between the two parties.

The relationship measure we used, HAS, is a simple measure developed for psychiatric patients, which has been found to be associated with the more widely used Working Alliance Inventory [13] for people with severe mental illness [1]. We adapted it only minimally for the use with vocational workers by adjusting the terminology; it proved easy to use in this context. The HAS takes a client-centred perspective on the client–professional relationship [7], focusing on the professional's delivery of key qualities such as understanding, trustworthiness and commitment to the treatment, rather than assessing the client's motivation or collaboration.

Our analyses were limited by the quantity of therapeutic relationship data collected, which was reduced at follow-up. There were many more clients who could not give a relationship rating in the control rather than IPS service, owing to not having an identified professional to whom they related or not having seen this individual sufficiently often to make a rating.

The fact that there was a reduction over time in the amount of data collected on the therapeutic relationship between client and clinical keyworker may have been due to some of these clients having been discharged from clinical care. This information was not collected systematically, however.

We did not collect therapeutic relationship ratings from clinical keyworkers, as the relationship with the keyworker per se was not the main focus of this study. Patients and their keyworkers or therapists may assess the therapeutic relationship differently; yet the two ratings have been found to predict outcome equivalently in psychotherapy [17]. This may nevertheless have limited our ability to test the predictive validity of the client–keyworker relationship.

## Discriminating between tasks: the impact on outcomes

The client-rated relationship with the vocational worker was a predictor of getting a job [8], but not of any clinical or social functioning outcome. Although the HAS does not ask about therapeutic tasks or goals (unlike some relationship measures such as the WAI), this suggests that the impact of the relationship is on the shared task—in this case, enabling the client to find and maintain competitive employment—rather than having a more broadly beneficial effect. It is also possible that this association may have been mediated by particular client characteristics not assessed here, such as good social and interpersonal skills, which might have made clients better able both to build relationships with their vocational workers and to find and maintain employment. The role of such mediating factors, however, might be likely to apply as strongly to the client–keyworker relationship, yet the latter was not found to predict getting a job [8].

Conversely, clients' ratings of the relationships with their clinical keyworkers might be expected to predict a range of clinical and social outcomes [18, 25] including client-rated needs [15]; in fact, they were predictive only of slightly higher subjective quality of life. This lends tentative support to the idea that a client–professional relationship may impact only on outcomes specific to their shared task.

In contrast, vocational workers' ratings of the client–vocational worker relationship predicted a number of clinical and social functioning variables, with better relationships being associated with better functioning (in terms of symptoms and disability), fewer positive, negative and general symptoms, less social disability and less depression 6 months later (the latter only a trend) and of being in the remission for the subsequent 6 months. This difference between the predictive power of the client–vocational worker relationship as rated by each party is, perhaps, not surprising given the very low correlation between the two. The magnitude of these associations was very small and not of great clinical significance in most cases, except for remission, where the odds of being in remission for the subsequent 6 months rose by 60% for every 10-point increase in HAS-p. To confirm that these associations had true predictive validity, we repeated this analysis using

variables at contemporaneous data points and this demonstrated that most of these clinical and social variables were also associated with contemporaneous HAS-p ratings. This suggests that, rather than being predictive of the client's subsequent clinical or social functioning, vocational workers' ratings of the relationship were driven by their impression of the client as a person and how easy the client was to relate to: functioning and symptoms, being in remission and quality of life, the latter arguably suggesting that such clients might be more favourably disposed towards their vocational workers.

The only clinical variable robustly predicted by the vocational worker's rating of the relationship 6 months previously was, thus, depression and this was only of borderline significance. Given that client–vocational worker relationship has been shown to predict obtaining employment [8] and that working has been shown to be associated with a subsequent slight reduction in depression [4], it is possible that this association between the client–vocational worker relationship and reduced depression indicates a mediating role for the relationship rather than a direct impact.

### Discriminating between relationships

The relationship with the clinical keyworker at baseline has also been found to be one of few predictors of the client's rating of the relationship with the vocational worker at T1 [9], which suggests that having a good relationship with one professional makes the client favourably disposed towards a new professional. Client ratings of the two relationships were also significantly correlated at contemporaneous time points, although the magnitude of this correlation was not very high. There was no evidence, however, that the development of the client–vocational worker relationship over time either enhanced or detracted from the client–keyworker relationship. For a clinical keyworker to refer their client to vocational rehabilitation is evidently not to the detriment of their own relationship with the client. This finding does not suggest, however, that clients are so strongly predisposed towards services as to determine fully the quality of their subsequent relationship with the new professional, as only about half of the variance in the client–vocational worker relationship was explained by the client–keyworker relationship.

### Conclusion

This study suggests that the impact of the client–vocational worker relationship may be on the shared task of finding employment, rather than having a broader impact on clinical and social functioning. This lends support to the idea of task

specificity in therapeutic relationships. The study also lends more modest support to the idea that relationships with different professionals are distinct from each other, as the initiation of a new professional relationship with a vocational worker neither detracts from nor enhances the existing relationship with the clinical keyworker. This may suggest that the quality of the relationship is not pre-determined by client factors such as a predisposition to form good relationships or a general appraisal factor. Nevertheless, half the variance in the client–vocational worker relationship was predicted by the client–keyworker relationship; this matter would clearly benefit from further research. In their investigation of associations between client-rated outcomes, Hansson et al. [12] found treatment satisfaction to load onto a separate factor from general appraisal. The lack of evidence for appraisal impacting on relationship ratings in this study may be due to there being a stronger association between therapeutic relationship and treatment satisfaction than therapeutic relationship and appraisal, which this study did not assess. This too would benefit from further exploration.

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**Conflict of interest statement** We declare that we have no conflict of interest.

### Appendix

#### The EQOLISE Group

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